

## WHAT IS CLAIMED:

1. In a telephony over data network system having at least one originating gateway and at least one terminating gateway, a method of adapting said originating gateway to

5 be associated with more than one carrier, said method comprising:

assigning a carrier-identifying indicia;

storing said indicia in a storage medium associated with said originating gateway;

comparing said stored indicia to data associated with an incoming call; and

10 if said stored indicia matches data associated with said call, connecting said call a carrier corresponding to the assigned indicia.

2. The method according to Claim 1 said step of connecting said call further comprising receiving an IVR script from said server associated with said carrier.

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3. The method according to Claim 1 said indicia comprising at least one digit associated with said incoming call.

4. The method according to Claim 1 said indicia comprising a PIN.

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5. The method according to Claim 1 wherein said originating gateway comprises more than one port.

6. The method according to Claim 5 said indicia comprising a port identifier.

7. The method according to Claim 1, said step of assigning performed by a system gateway administrator.

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8. A system adapted to provide multiple voice communication carriers access to a data network via a single gateway in a telephony over data network system having at least one originating gateway and at least one terminating gateway, comprising:

a carrier-identifying indicia stored in a storage medium associated with said

10 originating gateway;

a means of comparing said stored indicia to data associated with an incoming call; and

if said stored indicia matches data contained in said call, a means for connecting said call to a carrier corresponding to the assigned indicia.

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9. The system according to Claim 8 further comprising a means for receiving an IVR script from said carrier.

10. The system according to Claim 8 said indicia comprising at least one digit

20 associated with said incoming call.

11. The system according to Claim 9 said indicia comprising a PIN.

12. The system according to Claim 10 wherein said originating gateway comprises more than one port.

13. The system according to Claim 12 said indicia comprising a port identifier.

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14. The system according to Claim 8 comprising a system gateway administrator a means for assigning carrier-identifying indicia.

15. Apparatus comprising a gateway adapted to accommodate more than one carrier  
10 for telephony over a data network having a plurality of destinations, said network comprising an originating gateway and terminating gateway, the apparatus comprising:  
a memory for storing carrier-identification indicia;  
a receiver for incoming calls;  
a comparator for comparing data associated with said incoming calls with said  
15 carrier-identification indicia for the purpose of authentication; and  
a router for routing authenticated calls to a carrier.

16. In a telephony over data network system having at least one originating gateway and at least one terminating gateway, a method of adapting said originating gateway to be  
20 associated with more than one carrier, said method comprising  
providing at least one originating gateway with more than one port;  
assigning to carrier servers in said network a particular port within said at least one originating gateway;

assigning to each port a carrier-identifying indicia;  
storing said indicia in a storage medium associated with said originating gateway;  
comparing said stored indicia to data associated with an incoming call; and  
5 if said stored indicia matches data contained in said call, connecting said call to a server associated with a carrier corresponding to the assigned indicia.

17. A gateway comprising software to identify an entity responsible for authenticating a call and software to route the call for authentication over a data  
10 network to a server associated with said entity.

18. The gateway of claim 17 wherein the software identifies the entity by determining at least one of: which port said call arrives, a carrier identifier, one or more digits associated with the call, or out of band information.

19. A gateway comprising software to identify an entity responsible for implementing an IVR script for a call and software to route said call to an IVR server associated with said entity.

20. The gateway of claim 19 wherein the software identifies the entity by determining at least one of: which port said call arrives, a carrier identifier, one or more digits associated with the call, or out of band.

21. A gateway comprising an interface to convey an IVR script from a remote server to a calling apparatus, the gateway further comprising a selection means to convey a different script depending upon an identifier associated with a call associated with said calling apparatus.

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22. The gateway of claim 21 wherein the identifier comprises at least one of: a carrier identifier, one or more digits associated with the call, or out of band.

23. A method of routing a signal onto a network comprising examining the signal to determine if AAA functions can be assumed to have already been accomplished, if so, accepting the call, if not, examining the signal to ascertain a third party entity which can perform said AAA functions, and signaling said ascertained third party to perform said AAA functions.

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24. The method of claim 23 wherein said signal is at least one of voice, video, or data.

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25. The method of claim 24 wherein said examining comprises ascertaining a port upon which said signal arrived and, if said port is in a first set, assuming the signal is authorized to be routed, and if said port is not in said first set, determining if said call may be accepted for routing by contacting a third party entity.

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